

## CLAIMS:

1. An integrated circuit (100), comprising:
  - an external power supply line (130);
  - an internal power supply line (120);
  - a circuit portion (102) coupled to the internal power supply line (120);
  - 5 an enable transistor (104) for coupling the internal power supply line (120) to the external power supply line (130); and
  - control means (150, 160) coupled to a gate of the enable transistor (104) for switching the enable transistor (104) to a conductive state with a first gate voltage, and to a non-conductive state with a second gate voltage,
  - 10 characterized in that the control means (150, 160) are arranged to reduce a leakage current through the enable transistor (104) in the non-conductive state by biasing the second gate voltage.
2. An integrated circuit (100) as claimed in claim 1, characterized in that the control means (150) comprise a further transistor (154) having a substrate that is  
15 conductively insulated from a bulk substrate of the integrated circuit, the substrate being coupled to a bias voltage source (170), and the further transistor (154) being responsive to a control signal for switching the enable transistor (104) to a non-conductive state.
- 20 3. An integrated circuit (100) as claimed in claim 2, characterized in that the bias voltage source (170) comprises a backbias generator being responsive to the control signal.
4. A battery-powered electronic device (200), comprising a power supply line (230) coupled to a contact (222) of a battery container (220), characterized in that the power  
25 supply line (230) is coupled to an external power supply line (130) of an integrated circuit (100) according to claim 1.